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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

REMOVAL OF A CYST OF THE BROAD LIGAMENT.

BY R. STANSBURY SUTTON, A. M., M. D.,
Of Allegheny City, Pa.

Miss F. H., a resident of Pittsburgh, aged 21 years, presented herself at my office July 7th, 1876. Her parents were Bohemians. She was born in Pennsylvania, and had living and well two sisters and three brothers. Until five years ago, or up to her sixteenth year, her health was excellent. She menstruated first at fourteen. At sixteen she became irregular, and observed about this time an increase in the size of her abdomen. A year after this she was tapped by Dr. John Dickson, and eight quarts of clear fluid removed. She describes the fluid as being "clear as well water." Thirteen months later she was tapped again, by Dr. A. G. Walter, and ten quarts of similar fluid were removed. Eight months later she was tapped again by Dr. Walter, and twelve quarts of similar fluid were removed. On the 10th of August, 1875, she was subjected to the fourth tapping, this time by Dr. Duff. Forty-two pounds of clear fluid were removed. It is, therefore, scarcely a year to-day since she was tapped. She reports a good appetite, daily action of the bowels, and the ability to sleep well.

MEASUREMENTS.

Around the body at umbilicus, 42 inches.
From ensiform cartilage to umbilicus, 9 do.
From umbilicus to pubis, 10½ do.

From umbilicus to right superior
spinal process of ileum, 10½ inches.
From umbilicus to left superior
spinal process of ileum, 10½ do.
Around the body two inches above
umbilicus, 41½ do.

Fluctuation is very distinct over the entire swelling. Change of position does not alter the boundaries of fluctuation. The abdominal walls glide readily under the hand over the anterior and lateral aspect of the growth. The epigastric veins are slightly enlarged. The umbilicus is level with the general surface. Patient considerably emaciated. The expression of countenance is not decidedly ovarian. The uterus is retroverted, movable, and measures in depth 3½ inches.

The following facts gained in this examination may be tabulated:—

1. The patient is young.
2. The growth has not been rapid.
3. The tumor is large, but the general health tolerably good.
4. The abdominal veins are less enlarged than usual, with great distention.
5. Fluctuation very distinct and continuous over entire growth.
6. The expression of countenance not decidedly ovarian.

July 31. To-day I introduced a large aspirator needle into the cyst, and through it evacuated thirty-four pints of fluid, literally "as clear as well water." This fluid possessed high refractive power, contained no albumen, but chloride of sodium. Its specific gravity was 1.008. It was very apparent that the cyst was of the broad ligament. At this tapping

the cyst was not emptied, but considerable fluid was left in it intentionally. Ordered tincture ferri chloridi, gtt.xx ter die, and good diet. Also lithia citrate, grains v, in a glass of water, each morning before eating.

August 14. At 10½ A. M., Squibbs' ether was administered by Dr. Giesking. Assisted by Dr. Rahausser, the family physician, Dr. Lemoyne and Dr. Purviance, I proceeded to operate. An incision four inches long was carried through the abdominal wall in the line of the linea alba. The cyst, partially empty, was seized with a tenaculum and partly drawn through the incision. Fitch's trocar was now introduced, and the cyst rapidly emptied of twelve pints of fluid. It was now carefully drawn out, and found to be a cyst of the left broad ligament. Its pedicle was very short and very broad. The ovary adherent to the cyst was healthy. A needle threaded with four strands of carbolized silk was now carried through the pedicle about its centre. The needle was cut away, and each half of the pedicle tied firmly with two strands of ligature. The pedicle was now severed an inch posterior to the ligatures and the cyst removed. After sponging out the belly, the ligatures were cut off close to the knots and the pedicle dropped in. The wound in the abdominal wall was now closed with sutures of carbolized silk, a bandage adjusted, and the patient placed in bed. Pulse 88. Pain being complained of, an injection of morphia was given subcutaneously, a jug of hot water placed to the feet, and milk and lime-water ordered to satisfy either thirst or hunger.

14th, 10 P. M., temperature 101°; pulse 106.

15th, 10 P. M., temperature 100.2°; pulse 106. Removed two stitches from wound.

16th, 10 P. M., temperature 100.1°; pulse 104. Removed two stitches from wound.

17th, 10 P. M., temperature 100.3°; pulse 116. Removed the last stitch; wound closed.

18th, 10 P. M., temperature 100.4°; pulse 108; is eating well; ordered quinine sulphate, grs.v, and tinct. opii., gtt.x, per rectum, daily, to avoid tympanites, and as a tonic.

19th, 10 P. M., temperature 100.4°; pulse 98. Taking also to-day a dessertspoonful of brandy, at meal time.

20th, 10 P. M., temperature 99.4°; pulse 100.

21st, 10 P. M., temperature 99.4°; pulse 100. Complains of frequent desire to pass feces, without any result. On passing the finger into the rectum it was found packed. It was broken up

and emptied, by the aid of large injections of soapsuds, of a large quantity of fecal matter.

22d, 10 P. M., temperature 99°; pulse 84.

24th, 10 P. M., temperature 98.5°; pulse 80.

Sitting up to-day in bed.

30th, 10 P. M., temperature 98.5°; pulse 80.

Sitting up, appetite good, out of bed to-day.

September 2d. Slight neuralgia, intercostal, to-day; ordered a flannel jacket.

September 3d. Neuralgia gone.

September 4th. Discharged.

September 27th. I visited this patient to-day, the forty-fourth since the operation, and found her actively engaged in household duties, and looking cheerful and happy.

During the first four days after the operation the catheter was used every six hours by Dr. Rahausser, who remained associated with me in the after-treatment of the case.

MONOBROMIDE OF CAMPHOR.

BY I. J. M. GOSS, A. M., M. D.,
Of Marietta, Ohio.

The monobromide of camphor consists of one equivalent of camphor and one of bromide, united ($C_{10}H_{16}O, Br.$). It is a white crystalline salt, having the odor of camphor, and slightly that of bromide. The atmosphere decomposes it when it is exposed at a heat of 100°. Monobromide of camphor was first used by a Belgian physician, and then by Professor Hammond, of New York. The last-named physician has used it in infantile convulsions from the irritation of teething, in doses of one grain every hour, until the convulsions ceased, which required one dose in one case, and two in another. Also in a case of hysteria, occurring in a young married lady, in the form of paroxysms of laughing and weeping, alternating with epileptiform and choreiform convulsions. He gave it in doses of four grains every hour, and it required ten doses to break up the attack. He likewise used it in headache of young girls and older women, arising from mental excitement and excessive study. In these cases, one dose of four grains was sufficient to cure these headaches. He treated a case of delirium tremens in a large plethoric man, who had taken one hundred grains of bromide of soda before, and could not sleep; but five grains of bromide of camphor produced sound sleep for twelve hours, the patient falling asleep in half an hour

after taking it. The well-known effects of both these remedies upon the generative organs point to this compound as a direct and potent remedy in many diseases of that part of the system. It is a very positive remedy in chordee, and should be given in small doses, say one or two grains every hour until relief is obtained, one or two doses generally giving relief. In nymphomania we have no remedy equal to this compound salt of camphor and bromine. In spermatorrhoea, with nocturnal emissions and amorous dreams, it is one of our most positive remedies, and for these diseases, peculiar to masturbators, it may be given in doses of three or four grains, at bedtime; and if it is an old case, it may be given three times a day for several days, until the brain is sufficiently impressed by it.

In those cases of cerebral anæmia that occur in those who are excessive in their indulgence of the virile passions, the bromide of camphor is a positive remedy, given in doses of four or five grains three times a day, until sleep is produced and the nervous system becomes normal. In cases of debility, where there is coldness of the extremities from want of force in the heart, three or four grain doses three times a day will be found to equalize the circulation. It impresses the cerebro-spinal system, and lessens any preternatural excitement of it, as paralysis agitans, called shaking palsy. It is also a very prompt remedy for nocturnal incontinence of urine, in young or old, and should be given to adults in six-grain doses, at bedtime, and to children in one or two grain doses, according to age.

In that *opprobrium medicorum*, masturbation, which soon produces such exhaustion of nerve power as to affect the whole vegetative system, we have in this combination a remedy that meets the indications, so far as the circulation is concerned. If, however, the habit has been indulged in for a considerable time, then the bromide of camphor will have to be alternated with the phosphates or phosphorus, to supply medullary material. When masturbation has been long practiced, it results in spermatorrhoea, and often in prostaticorrhoea; and as the sperm cells consist of nerve, it is apparent that excessive discharges of spermatic fluid, in any way, leads to debility and exhaustion, and also to cerebral inactivity, and often to insanity. Now, it is well known that bromine, in the form of the bromide of ammonia and potassa, is the most

powerful antiphrodisiac that we possess; and camphor also possesses the same power in a considerable degree. A combination of the two has resulted in one of our most positive remedies for that irritable condition of the brain that results from either excessive sexual indulgence or masturbation, and will be found to relieve many of the sequents of that peculiarly morbid condition of the cerebro-spinal system. It will also be found the remedy for all those diseases caused by cerebral anæmia or exhaustion. The camphor predominates in effect, and hence stimulates the cerebro-spinal system, and thereby counteracts the tendency to paresis of the brain and cord; but it should not be given in large doses, as it would then prove toxic in its effects.

LOSS OF BOTH PAROTID GLANDS FROM SUPPURATION OF THE SURROUNDING AREOLAR TISSUE.

BY J. S. WRIGHT, M. D.,
Of Gatchelville, Pa.

I was called to see Issacher McLane, aged ten years, April 29th, 1876, and found the patient suffering intensely from gastro-enteritis. The inflammation for several days was of a very high type, and the pulse, ranging from 100-140, was full and bounding. Treated the case with antiphlogistics and anodynes, giving veratrum viride to control the circulation. A blister was applied to the abdomen. The inflammation subsiding I gave tonics and stimulants to support the system. The patient began to convalesce, and on May 7th I concluded to make but one more visit.

May 8th. He was not so well as the day previous. Pulse more frequent; tenderness and redness over the parotid glands; complained of stiffness of the neck.

May 9th. He was much worse; the face and neck very much swollen; pulse frequent and thready. Sent for Dr. W. F. Smith, of Airville, to meet me in consultation immediately. Diagnosis, erysipelatos inflammation of the cellular tissue of the neck and around the parotid glands.

Treatment. Tinctura ferri chloridi, ten drops, alternately with pill sulph. quinia, 2 grains every four hours. Tinct. aconite rad., two drops three times daily. Gave one-tenth grain of morph. sulph., to relieve pain, and infusion of senna and epsom salts for bowels, as required;

Locally, mucilage of elm bark and sol. acet. lead and opii.

May 10th. No improvement.

May 11th. Called Dr. Smith in consultation again. We both examined the patient carefully and could detect no signs of the formation of pus. Agreed to continue the treatment.

May 12th. Still no improvement.

May 13th. Change appeared for the worse. Great difficulty in swallowing, from stiffness of jaws; the mouth could scarcely be opened sufficiently to admit a small teaspoon. Difficult respiration.

May 14th. Detected fluctuation over the left parotid; made a free opening vertically. Pus flowed freely. Owing to the resistance of the patient I was unable to examine the right side.

May 15th. The patient still resisting, I gave chloroform and made a free incision over the right parotid, thus giving free discharge. Applied warm water dressings and poultices of flaxseed, medicated with acetate of lead and laudanum.

May 16th. The pus continued to flow freely from each ear, also from the opening over the parotid glands, and by using a syringe charged with warm water it passed from the ears through the external openings over the glands. The pus having opened into each auditory canal, I ordered the ears to be thoroughly syringed three times daily with warm water; and had the poultices changed frequently.

This treatment, together with the iron and quinia, I continued, and both parotid glands came out wholly at the openings. The patient after this began to recover rapidly, and on June 5th dismissed the case as cured. I have since made inquiry of the family and have been informed that he does not suffer any inconvenience whatever from deficient saliva, and has made a complete recovery.

ACTIVE HEMORRHAGE PRODUCED BY COITUS.

BY F. H. CRANDALL, M. D.,
Of Medina, New York.

I was consulted by Mr. L., who was married three weeks previous, stating to me that his wife had been flowing constantly since the first time of coition, and that she was becoming quite weak. I asked him if he knew how long it was since her last menstrual period, to which he replied that it had just ceased at or about the time of coition. I asked him if she

seemed to enjoy sexual intercourse; he said she tried to, but could not. He gave her age as thirty-five years. I asked to see his wife, to which he said she objected, on account of delicacy, but added, if I would send her some medicine, if she was not better in the morning I would be called. I ordered one-drachm doses of the fluid extract of ergot every two hours, and ten grains of gallic acid every two hours, alternating the doses.

October 16, at 10 A. M., I was summoned to see Mrs. L. Found her in bed; countenance pale and anxious; pulse 110; respirations 22; skin warm and dry; a little headache and considerable nervous irritability; tongue coated; bowels regular. Said she was flooding just as bad as before she took the medicine. Upon digital examination, I found the uterus to be *in situ*. I introduced the speculum, and found that the hemorrhage proceeded from the intra-uterine walls. I passed the sound, and found the measurements of the uterus to be normal, and no polypus nor abnormal condition of the uterus that I could see, except heat. The vaginal pulse was perceptible, and increased softness of the vaginal portion and tenderness of the uterus, when pressure was made upon its walls through the vaginal roof.

I pronounced it a case of active intra-uterine hemorrhage, produced by coition taking place soon after the menstrual flow had ceased, and while the ovaries and uterus were in a highly congested state. I introduced the tampon, ordered the gallic acid discontinued, and gave acetate of lead, three grains, with half a grain of opium, every four hours; the ergot to be continued, with five grains of quinine night and morning; beef essence and milk for diet. I elevated the foot of the bed, had all pressure removed from the waist and abdomen, and ordered perfect quiet and rest upon the part of the patient.

At 9 P. M. I removed the tampon. The hemorrhage seemed just as active as ever, and there was retention of urine. I used the catheter, and resolved to make an intra-uterine application of an ointment made of the persulphate of iron and simple cerate. I went to my office to prepare the ointment, and Dr. Warren, of Lyndanville, called in to see me. I gave him a history of the case, and invited him to visit it with me. After an examination, he thoroughly agreed with me in the diagnosis and treatment. I then made the application

of the unguentum ferri to the intra-uterine walls, with Barnes' uterine ointment positor. I continued the acetate of lead and opium. As the pulse was becoming more frequent and the skin dry, I ordered liquor ammonia acetatis, freshly prepared, in two-tablespoonful doses every two hours, and five grains of quinine night and morning. At 2 A. M. on the 17th I was summoned by the husband, saying that Mrs. L. was dying. I told him to call Dr. Chapman in consultation.

On my arrival I found that the hemorrhage had subsided more than half, and that the alarm of the friends was caused by a nervous sinking spell. I ordered a little brandy, and after a brief consultation with Dr. Chapman he thought my treatment was sufficient. I ordered it continued. At 12 M. I called in company with Dr. Warren, and found the hemorrhage gradually subsiding and patient feeling comfortable. We assured her that the danger was over, and that she was doing as well as could be expected.

Owing to a pressing engagement, I was constrained to leave my patient for a few hours, and during my absence Dr. G— was called; on my return he stated he had not prescribed, but he had some suggestions to make as to future treatment. He advised giving fluid extract of ergot, in two-drachm doses every two hours, with quinine. I replied that the quinine was proper, but that I saw no reasons for giving the ergot; besides, I had used it in my earliest treatment of the case. He then advised me to give Monsell's solution, a half-drachm every thirty minutes, for its hæmostatic effects. The hemorrhage was sufficiently controlled; the main thing now was to treat the fever, quiet the nausea and allay nervous excitement. I thought that it would be a serious clinical error to administer iron at this stage of the case. I proposed to give subnitrate of bismuth, grains v, with $\frac{1}{4}$ of a grain of morphia, to correct the nausea and allay the general irritability; to give quinine and continue the saline solution; to reduce the temperature and supply the loss of fluids to the system, to which the doctor demurred and condemned the treatment. I called in Dr. Chapman, who agreed with me in treatment; and the patient commenced to convalesce in a few days, without Monsell's solution, however, and I never have learned that there has been any subsequent hemorrhage from the same cause.

I consider this a case of great interest, from its rare occurrence. The uterus is the only organ in the body from which blood flows as a physiological process; many organs and all the erectile tissues are subject to normal congestion. It is then fair to suppose that perhaps, with an unsound mucous membrane, excess of coitus at or near the menstrual epoch will set up active hemorrhage; but these cases are very rare, as far as my experience extends. I never have known of but one other case; that was a friend of mine, who commenced flooding while at the dinner-table in the Metropolitan Hotel in New York city, the next day after she was married, and it came near proving fatal, the hemorrhage being so profuse. Hemorrhages, from whatever cause or nature, are more or less alarming to both patient and friends, and call many times for active treatment on the part of the attending physician, and on that account it is advantageous to the medical profession to report such cases, so that we may bear them in mind, study them up, and be prepared to use the most efficient means at our command.

TREATMENT OF OVARIAN CYSTS BY ELECTRICITY.

[We give some further notes on Dr. v. Ehrenstein's treatment, mentioned last week.—ED. REPORTER.]

Dr. v. Ehrenstein, says: "Let ovariectomy receive the highest honor and acknowledgment which its great successes both deserve and obtain; still, the most celebrated ovariectomist dare not deny to himself that it was, and remains, the bitterest therapeutical necessity alone which forced the knife into the physician's hand, to venture with it a possibly fatal vivisection upon the innocent object of treatment. Already, from this point of view, we are justified in seeking for another method of treatment, which will cure, or at least convert this baneful disease into a permanently innocent affection. As such a remedy, I have for five years learned to know the electric current.

"Not until the full importance of this fact, which I regard more as an invention than an accidental discovery, is admitted by my colleagues, can the origin of my method of cure command interest. In this place it is only desired to attract attention to the following words in italics, if possible, in the most distant and private circles, where many a trembling

sufferer seeks concealment from the ovariotomist's knife with only too just a dread:—*That from this time forth a remedy exists in electro-therapeutics for hydrops ovarii, which—for the sake of its extraordinarily painless and safe character, combined with a high probability of complete cure, and the almost certain prospect of at least the greatest possible amelioration of the symptoms, as well as a diminution of the danger to life which pertains to the sufferings—may under all circumstances claim to be applied first, ere we puncture, and even cast dice for life and death with ovariotomy.* For five years I have remained silent, in order that the invention, which has become dear to me, might not in these days of universal destruction meet with an untimely end through unpropitious extraneous influences. But during this time I have cured the greater portion of hundreds of cases, and always at least caused improvement. Every day finds me uninjured by the groundless prejudices which have been operating against me, whilst more cases of ovarian cyst come to me for electrical treatment. These facts should cause impartial colleagues to omit expectant treatment, puncture, or ovariotomy, until they have tried electro-therapeutics, which will, as a rule, render resort to the other methods unnecessary.

"Envy and malice arose in certain Dresden circles, and stories were circulated that I drove glowing needles into the abdomen of my patients, cicatrices from which were said to have been seen; these are inventions, and expose the sad ignorance of those who have allowed themselves to be gulled into spreading the falsehoods on the subject of electro-therapeutics. Even then I could prefer to remain silent, and treat the numerous ovarian cysts which better informed Dresdeners, as well as other German and foreign colleagues, sent to me. But when I now hear of unfortunate cases which are said to have occurred in the practice of foreign physicians, because they did not correctly understand and properly apply my method, and when a physician in Mexico, whom I do not know at all, and who obtained a few hints about my method from a former patient of mine, on the strength of which he has treated a small number of cases in Puebla, says peremptorily, in the *Wiener Med. Presse*, "No more ovariotomy!" then the fate from which I hoped to shield my method by silence threatens to overtake it, and I am in duty bound to pub-

lish the history of my cases as fully as the circumstance requires. This will be done very soon."

In the same periodical, on May 10th, Dr. T. Clemens, of Frankfort-on-the-Main, claims priority in the application of electricity for the treatment of ovarian tumors, and quotes from his article in the *Deutsche Klinik*, of July 2d, 1859, to prove his position. To this Dr. v. Ehrenstein replies, in the issue of May 17th, that their methods differ entirely; that the former does not appear to have met with sufficient success to cause an extensive adoption of his method, else why is ovariotomy, seventeen years after he began to teach its application, in fuller bloom than ever before? Dr. v. E. leaves the decision between the merits of the two methods to science and experience.

Both gentlemen appear to be indignant that Dr. Semeleder should have published his cases treated in Mexico before they had made their own claims sufficiently prominent; and Dr. v. Ehrenstein thinks Dr. S. should have left the fiat, "No more ovariotomy!" for the electro-therapeutists to issue after further experience and study. He is not yet prepared to go so far as to speak those words, but has great hopes that this consummation will soon be reached. He admits that Dr. Semeleder only claims to have treated cases after a method described to him by a patient who had been treated in Germany, and Dr. v. E. states that she was treated at his institution first, and then sought a Dr. Fieber in Vienna, who continued the same mode of treatment, or one very similar; and the claim of Dr. S. to priority in the application of the method in the *New World* is not disputed by our author.

After all, Dr. Semeleder appears to have done more toward bringing the matter into publicity than any one else.

MEDICAL SOCIETIES.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The American Public Health Association, which held its annual meeting in Boston last week, was not largely attended. It accomplished, however, an amount of good and useful work entirely disproportionate to its numerical strength. Its labor was more thoroughly systematized than at previous meetings, and the discussions were decidedly more interesting than those evolved from the papers read at the Baltimore session of 1875. Boston should be, from its professions, the very choicest place for the gathering of men devoted to the interests of public health, but the Association has to thank itself for the amount of practical work it effected in Boston, independent of Boston official recognition, although it received valuable assistance in papers presented by individual sanitarians of that city and its vicinity.

The following division of subjects was made by the Executive Committee, under which all

discourses, papers, and discussions were embraced:—1. Legislation and the application of law for public health purposes. 2. Dangerous employments and harmful processes. 3. Topographical and sanitary surveys, and other systematic works for public health purposes. These formed a very comprehensive field, in which many valuable papers were offered by sanitarians from different parts of the country. The officers for the year were the following:—

President—Edwin M. Snow, M. D., Providence, R. I.

First Vice-President—John H. Rauch, M. D., Chicago, Ill.

Second Vice-President—Francis A. Walker, LL.D., New Haven, Ct.

Treasurer—J. Foster Jenkins, M. D., Yonkers, N. Y.

Secretary—Elisha Harris, M. D., New York.

The Association met on Tuesday, October 3d, and adjourned on Friday, the 6th, occupying not only each morning and afternoon in its deliberations, but several evenings also. Few gatherings of this or any other kind confine themselves so closely and conscientiously to the objects for which they convene, in total disregard of all social and convivial claims upon them.

The proceedings of the first day included an address of welcome by Professor William Ripley Nichols, Chairman of the Committee of Arrangements, and the opening address of the President, Dr. Snow, congratulating the friends of sanitary science on the progress made during the few years past.

Hon. Henry G. Crowell, of Boston, read a paper on "Sanitary Regulations relating to Abattoirs," reviewing the history of the legal attempt to abate the evil connected with the slaughtering of animals, from the earliest period, and urging the advantage of concentration in one locality, where suitable buildings and appliances are prepared for the purpose.

Dr. E. H. Janes, Assistant Sanitary Superintendent of New York, read a paper on the same subject, in its application to that city, giving a statement of the location and work of the abattoirs and smaller slaughtering houses.

The number of beef cattle annually slaughtered in New York was given as 363,550, besides 750 that were weekly killed by one concern for exportation. There were also 1,155,000 small cattle, such as sheep, etc., and 1,200,000 hogs, slaughtered annually, though there had been considerable falling off during the hard times. The abattoir on West Thirty-fourth street was described, with its facilities for rendering offal and refuse, and forcing offensive gases through a sewer into the river. The advantages of this water sewerage were especially emphasized, the board of health making daily inspections. The gases were conveyed eight feet below the surface of the river, when they became absorbed and deodorized. The fifty-two separate slaughter houses would eventually be abolished, and the business concentrated in the abattoir on Fortieth street, near

the river. After considering the benefits afforded to agriculture and general business prosperity by converting refuse matter into a fertilizer, instead of allowing it to putrefy and breed disease, he offered the following resolution, which was adopted:—

Resolved, That concentration of the slaughtering business in large abattoirs, located at the water side, and remote from business centres and human dwellings, provided with facilities for utilizing all portions of the animal without delay, is regarded as essential for the protection of public health, and as conducive to individual economy.

The Association then adjourned until Wednesday morning, when papers were read by Hon. Emory Washburn, on "Expert Testimony," and by Prof. H. P. Bowditch, of Harvard, on behalf of Prof. Wolcott Gibbs, on the same subject. In the course of their remarks, and of the discussion, in which Prof. Horsford and Prof. Ordronaux took part, allusion was made to the distortion and suppression of facts and the prostitution of science by hired experts, so-called; to the necessity of having experts called by the court and rest of the parties to the suit, etc.; and on motion a committee was appointed to examine into the methods of obtaining this testimony which prevail in Continental Europe. Dr. L. H. Steiner, of Maryland, then read a valuable paper on "Expert Supervision of the Construction and Internal Arrangement of Public Institutions," to prevent injury to the health of the inmates.

In the afternoon, the members of the Association visited the abattoir at Brighton, about five miles from Boston, and carefully inspected its very satisfactory and complete arrangements. In the evening, after an introductory address by Rev. E. E. Hale, touching upon preventable diseases and the terrible infant mortality of our large cities, Professor Austin Flint read an instructive paper on "Food in its Relation to Personal and Public Health," in which he referred to the regulation of alimentation by instinct and individual experience, rather than by fixed laws; to popular errors in regard to diet, such as devotion to special classes of food to the exclusion of all others, etc. Prof. J. D. Runkle, of Boston, then read a paper on "Recent Improvements in the Health of Students," showing that debility, etc., at one time attributed to over-study, were really caused by irregular eating and insufficient food.

On Thursday, the following officers were elected for 1876-77:—

President, Dr. John H. Rauch, Chicago; *First Vice-President*, Dr. L. H. Steiner, Maryland; *Second Vice-President*, Dr. E. M. Hunt, New Jersey; *Treasurer*, Dr. J. Foster Jenkins, New York; *Secretary*, Dr. Elisha Harris, New York; *Executive Committee*, Dr. John M. Woodworth, Surgeon-General Marine Hospital; Dr. John S. Billings, U. S. A.; Dr. Jackson S. Schultz, New York; Dr. A. L. Gihon, U. S. N., and Dr. Charles F. Folsom, Boston.

Prof. E. S. Wood, of Harvard, read a paper

on "Illuminating Gas in its Relation to Health," taking exception to the use of water-gas, as being devoid of odor, and giving no warning of its noxious effects. Dr. Garvin, of Lonsdale, R. I., read a paper on the "Injurious Effects of Cotton Factories on the Health of the Operatives," showing the prevalence of chronic diseases, such as anæmia, dyspepsia and phthisis, and offered the following resolution, which, after discussion, was adopted:—

"That the due protection and welfare of factory operatives require: First, half-day schooling for children under sixteen years of age; second, uniform hours of labor, not exceeding sixty per week; third, frequent inspection of the mills and tenement dwellings of factory villages, and of the milk sold to the inhabitants, by an authorized public health officer."

Mr. S. Herbert Shedd, of Providence, R. I., read a paper on "Water Supplies for Large Institutions and Small Communities," urging that rivers should be kept pure rather than abandoned, as they were the best sources of supply.

Dr. Albert L. Gihon, Medical Inspector U. S. Navy, then read a paper on "The Need of Sanitary Reform in Ship Life," in which he dwelt on the backwardness of this reform on shipboard, resulting from popular ignorance, neglect of officials, or indifference of owners. Consumption and rheumatism still prevail, though scurvy and dysentery have been banished. Foul air, dampness and overcrowding were the exciting causes.

At the evening session, Dr. Henry T. Bowditch presided, and after some interesting remarks on sanitary matters, introduced Mr. Henley, Inspector Local Government Sanitary Board of London, who gave facts in regard to the workings of that board since 1871. Charlton T. Lewis, of New York, then read a paper on "Ancient and Modern Hygiene Contrasted," offering a number of reasons for the greater longevity of the present day, the duration of life being the best indication of human progress and civilization. Dr. J. S. Billings, U. S. Army, then read a paper on "The Rights, Duties and Privileges of the Community in Relation to those of the Individual in regard to the Public Health," taking the ground that the public had the right to compel the individual to observe sanitary laws without being compensated for the intrusion on his personal liberty.

On Friday, Dr. John Morris, of Baltimore, read a paper on "Scarlatina," as it prevailed in that city and elsewhere in Maryland, showing that the virulence of the disease was greatest along streams of stagnant and almost putrid water. Dr. C. B. White, of New Orleans, through Dr. Harris, Secretary, offered a paper on "Disinfection in Yellow Fever, as practiced in New Orleans in the years 1870 to 1876," arguing that the only certain method was by reaching a surface somewhat beyond the probable reach of the fever. James T. Gardner, C. E., then read a paper on "Topographical Surveys and Maps in their Relation to Public

Health," which was discussed by Prof. Pickering, Drs. T. Sterry Hunt, A. N. Bell, Prof. Runkle, Dr. Billings, and Profs. Whitney and Brewer. Col. G. E. Waring, presented a paper on the "Sanitary Condition of Country Houses and Grounds." Dr. Elisha Harris then offered the following resolution, which was adopted:—

Resolved, That it is the opinion of the American Public Health Association, that in every State, especially the more populous ones, a thoroughly accurate topographical survey is so essentially necessary as a basis of sanitary surveys and systematic drainage, and also the most desirable hygienic researches and works for prevention of disease, that the execution of such State surveys should be undertaken by the States as a duty to the life and welfare of the people.

Dr. Ezra M. Hunt, of New Jersey, read a paper on the "Sanitary Appointments of Dwelling Houses;" quite a number of valuable papers and reports were read by title, and referred to the Committee of Publication; a resolution was adopted declaring that the prevalence of yellow fever in Southern towns indicated need of better municipal means of prevention; and the Association adjourned, to meet in Chicago on the third Tuesday of September, next year.

NEW YORK PATHOLOGICAL SOCIETY.

Stated meeting, September, 27th, 1876. Dr. C. K. Briddon, President, in the chair.

Rupture of Uterus.

Dr. George T. Shrady presented a specimen of rupture of the uterus, in behalf of a candidate, and read the following history:—

A woman, aged thirty-five, on September 7th, at six o'clock in the evening, was attacked with syncope, at which time she was first seen. Soon after, consciousness returned, and the following facts were elicited:—She stated that she was the mother of three living children; that, six weeks before, she had been taken with uterine hemorrhage, which was arrested by her taking ergot, but it had subsequently returned at intervals. A vaginal examination showed that the uteri was dilated about an inch and a half. The membranes were not ruptured and the head was presenting. The uterine contractions were weak, and apparently localized to the left of the umbilicus. The countenance was pale and the pulse feeble. There was fluid in the peritoneum six hours after she was first seen. She was attacked with vomiting. After one of the paroxysms she complained of a burning sensation; this was accompanied by movements in the abdominal cavity. She then sank into a state of collapse, and died three hours after the occurrence of the vomiting.

Autopsy.—The abdominal cavity was found to contain a large quantity of dark-colored serum, and the bag of waters containing the fetus. The uterus was ruptured, the laceration extending from a point near the left

cornu, along the left and posterior part of the fundus, as low down as the cervix. The edges of the wound were irregular, and were apparently thinner than other portions of the uterine walls. Utero-gestation had progressed seven and a half months.

Two Cases of Exsection of Knee-joint.

Dr. Erskine Mason presented specimens of the knee-joint which he had exsected. The history of the first case was as follows:—

A woman, aged nineteen, and married, was admitted to Roosevelt Hospital on April 10th, 1876. She stated that at the age of seven she had been taken ill, and this illness had lasted for a period of ten months. After recovery her knee had remained stiff, which, however, did not incapacitate her from walking. She had received an injury of the affected joint two months before her admission to the hospital, which had caused her intense suffering. After the reception of the injury she was obliged to use crutches. On admission, she was found to be in the second month of pregnancy. The affected limb was atrophied, and the tibia subluxated backward and outward. On April 14th exsection was performed by Dr. Mason. An oval incision was made anteriorly, thus exposing the joint. The bones forming the joint were the seat of dry caries. After removal of the diseased portion of the bones, the extremities were brought in apposition by means of a silver-plated copper wire, which was followed by the application of a plaster-of-paris splint. The wires were removed six weeks after the operation. On July 3d the patient was first allowed to walk without the use of the splint. Dr. Mason said that this was the second case reported in which the operation had been performed during the period of utero-gestation.

The history of Dr. Mason's second case of exsection was as follows:—

A woman, aged twenty-two, had suffered from chronic synovitis for nine months. Exsection was performed in a similar manner as in the preceding case, on February 16th. The patient could walk by the aid of crutches on April 18th, and on the 28th was discharged from the hospital. Shortening of the limb existed to the extent of one and one-fourth inches when she left the hospital.

Lipoma.

Dr. Frankel presented a fatty tumor, which he had excised from a child two and a half years old. It was situated in the outer third of the infra-clavicular region, beneath the pectoralis major muscle. The tumor was about the size of a lemon when the child was four months of age, and was one-third larger when removed.

Excision of Wrist.

The President related the history of a case in which he had operated for disease of the carpal bones. Four months after the operation (at the time of report) the patient could pro-

nate, supinate, flex and extend the hand. There was only slight deformity and shortening to the extent of one and a fourth inches. The patient's handwriting was exhibited, thereby showing his ability in holding the pen. A plaster cast of the limb was exhibited to the members of the Society.

Carcinoma of Mammary Gland.

Dr. Heitzman exhibited specimens of the microscopic appearances of carcinoma of the breast, and of the skin taken from the parotid region. He stated that Dr. A. W. Hober, of this city, had studied the subject in his (Dr. H.'s) laboratory, the results of his labors having been published. According to Virchow, epithelial elements which were characteristic of cancer were formed by the development of such elements from connective tissue cells. Thiersch, Waldeyer, and others, whose investigations are more recent, believed that the epithelial cells originated from former epithelium. Dr. Heitzman showed that in the embryo the first formed elements were all similar in appearance, and that the development into the different peculiar tissues occurred later from these indifferent elements, such as takes place in inflammation. This occurred in the development of tumors, in which an indifferent tissue was first noticed, and from which different forms of connective and epithelial tissues were afterward produced. It was after observed that in tumors of a cancerous nature alveoli were found closed in all around with connective tissue and filled with epithelial cells; however, no connection was found to exist between the glandular epithelium and these newly-formed cells. The accumulation of cancerous elements could not be explained by the theory of immigration, as epithelium perfectly formed does not migrate; indifferent corpuscles alone have the property of migrating. Cancerous groups of epithelial elements may be seen separated from each other by fibres of elastic tissue; this was found to exist normally only in connective tissue. The truth of this view was strikingly proved, according to Dr. Heitzman, viz.: that the former connective tissue became changed into cancerous tissue, and that Virchow's proposition was true only to a certain extent. In addition, it became necessary to say that not the connective tissue cells only, but the whole amount of living substance within the basis substance, were capable of production, and under certain circumstances cancer elements could be the result of this production.

Anchylolysis of Elbow-joint—Excision.

The President presented specimens, with the following history:—

A woman, aged twenty-six, was admitted to the hospital on August 26th, 1876. She stated that about eighteen months ago she was attacked with severe pain in the elbow-joint, which was followed by an abscess. The patient had been unable to move the joint for the past year. On admission, the elbow was found to be

tumefied and flexed, not quite at a right angle, and the joint was ankylosed, this being fibrous in character. An incision was made along the posterior aspect of the arm; the lower extremity of the humerus and the ulna, as far down as the condyloid process, and part of the radius, were removed. Dr. Satterthwaite said that the patient had been under his observation for over two years at the Demilt Dispensary. A strong suspicion of her having syphilis was entertained at the time. A tumor had first made its appearance near the joint, which had later become the seat of disease. A sinus leading to carious bone was next found, after which a portion of the diseased condyle was removed. At the time of the operation no ankylosis existed.

Dr. Mason thought that dead bone could not always be detected by the use of the probe, as newly-formed connective tissue was liable to cover it.

Escape of Intestinal Worms through Sinus at Sacro-Iliac Articulation.

Dr. Gibney related a case where a sinus existed at the sacro-iliac junction, and through which intestinal worms and fecal matter would escape.

NEW YORK ACADEMY OF MEDICINE.

Stated meeting, October 5th, 1876, Dr. S. S. Purple, President, in the chair.

"The Malady of Innutrition" was the title of a paper read by Dr. Bayliss. The prevailing poverty and destitution now existing make it a subject of vast importance, and especially the relation it bears to disease. Dr. Bayliss said that nourishment should be of a generous character, both as to quality and quantity. It fortified the system, and acted not only in the prevention and diminution of the ravages of disease, but was conducive to the people's vigor and longevity. He thought that, should the present crisis last, even for a short period, pauperism and mendicancy would become developed to that degree for which the Continent of Europe is noted. He advised that the immediate wants of starving people be relieved by the establishment of centres, where food would be supplied; that the support of charities of a culinary nature be encouraged, and that those who are able should be urged to meet the wants of those who come within their immediate circle.

Dr. G. M. Smith said that innutrition was a vice of the American people, and the result of a pernicious habit of always being pressed for time. This was of common occurrence throughout the land, and could not be attributed to the relative or absolute necessities of life.

Dr. Peaslee remarked that the coming generation would, he thought, be influenced by the prevailing poverty which exists at the present time.

Dr. Hanks said in the tenement houses he had noticed that bread and tea were commonly the favorite form of diet employed.

Dr. Leaming said that eighteen or twenty years ago an excitement had occurred about swill milk, which was thought to be the cause of the high death-rate among infants that existed at that time. The municipal authorities had consequently solicited the opinion of the Academy of Medicine on the subject. He further stated that the swill-milk stables were situated in the same district of the city as a dispensary with which he was connected, and he had noticed that the children who had died had not partaken of any kind of milk.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, September 25th, 1876. Dr. Thomas Addis Emmet, Vice-President, in the chair.

After nominating officers of the Society for the ensuing year, the paper of the evening was read by Dr. S. A. Raborg, on "The Induction of Premature Labor in Contracted Pelvis, its Necessity and Safety in Cases ascertained prior to Full Term." The author first reviewed the indications for the induction of premature labor, and mentioned three cases of his own, in which it had been brought on by irrigation of the cervix. He then referred to the many methods which have been recommended for uterine and vaginal injections. Dr. Raborg proceeded to relate his own cases. The first one was that of a woman aged twenty-five, who had had several abortions and labors, in which craniotomy and version had been performed. The measurements of the pelvis were two and a half inches in the antero-posterior, transverse and oblique diameters. It was decided to bring on labor at the eighth month. An interrupted stream of warm water was thrown by means of Davidson's syringe on the posterior wall of the cervix uteri, and in the course of twenty-four hours pains occurred, and delivery was accomplished at the end of five days and a half. Pregnancy had again taken place, labor this time having been induced by means of a continuous current of water from an elevated reservoir. The woman was delivered in nine days and twenty-three hours. In the third case labor was accomplished in five days and eleven hours, after using the interrupted current of water. Dr. Raborg had found that the interrupted current was more satisfactory than the continuous current. Dr. T. G. Thomas' method of inducing premature labor was mentioned, viz.: by the introduction within the cervix of the nozzle of a Davidson syringe, and after compressing it (the cervix) the stream of water was directed against the membranes, thus partly detaching them. By this method labor had been completed within twenty-four hours.

Dr. Isaac E. Taylor had in his experience found that vaginal injections were not only unreliable, but in some cases he thought they retarded the labor. He used Barnes' dilators for that purpose.

EDITORIAL DEPARTMENT.

PERISCOPE.

Ergotin in Uterine Fibroids.

Dr. Lombe Atthill, of the Rotunda Hospital, Dublin, writes to the *British Medical Journal*:—

I, in common with all those who practiced the hypodermic injection of ergotin, as recommended by Hildebrandt, have found that this treatment, sooner or later, resulted in the formation of troublesome sores. I think it of some importance to say that, though this is perfectly correct with reference to the cases published by me, and quoted by Dr. Byford in his essay, it is not so with respect to my more recent ones. I have availed myself, since my appointment to the Mastership of this hospital, of the larger opportunity offered me here to carry out this treatment more extensively, and I give the following cases as examples of the results obtained. Case 1, of large intramural fibroid, in a widow, nulliparous, aged thirty-eight; prominent symptoms, distress from weight and size of tumor, menstruation increased but not excessive, returning at intervals of twenty-one days; with an intramenstrual discharge of blood, moderate in quantity, lasting for three days; thirty injections, practiced at intervals of two and three days. Result: total disappearance of the intramenstrual discharge, slight prolongation of the intramenstrual period, hardening and apparently slight diminution of the bulk of tumor, no pain caused by injection or irritation following it. Case 2. Single woman, aged forty-five, rendered exsanguine by profuse menorrhagia, accompanied by excessive pain, and lasting fifteen days and upward, intramenstrual period of not more than from seven to ten days; of late, in fact, seldom free from a red discharge; large intramural fibroid, filling up pelvis, and reaching to within an inch of umbilicus. Upward of sixty injections of ergotin; admitted January 6th. Result: March 10th, flow diminished in quantity and lasting for six days, intramenstrual period prolonged to twenty-one days; April 1st, menstruation reappeared this day, lasted but two days; May 21st, menstruated to-day, flow lasted four days. Marked as the improvement was as regards the check put on the loss of blood, her condition in other respects was not satisfactory; her sufferings, always great, were aggravated, the injection being always followed by severe pain, referred to the tumor, necessitating the constant use of morphia; she seldom could leave her bed; and I finally abandoned the treatment, and am now endeavoring to enucleate the tumor. I hope, at a future time, to publish the case *in extenso*. At present, I wish merely to point out the fact that the injection of ergotin,

in neither of the two cases I have detailed, was followed by the formation of sores; nor has it been in several others in which it has been recently practiced for a shorter time by me. The only explanation I can give of the greater success in my later cases is this, that whereas I formerly added a small quantity of glycerine to the solution of ergotin, as recommended by Hildebrandt, I now employ a solution of one part of the extractum ergotæ liquidum (*British Pharmacopœia*) in two of water, injecting 15 or 20 minims of this each time. I always insert the needle into the gluteus muscle, making it penetrate to the depth of more than an inch.

A New Treatment of Lupus.

In the treatment of this disease the plan introduced by Professor Volckmann is coming into favor.

Volckmann's plan consists of scraping away the absolutely rotten and friable portion of diseased skin (nodular lupus deposit) by means of a steel spoon with sharp edges, the patient being under chloroform, and then, when the wound has healed, of setting up traumatic inflammation of the circumjacent skin, affected with molecular lupus infiltration, by numerous punctures inflicted with the point of a somewhat narrow-bladed lancet, repeating the latter operation, under chloroform, at intervals of a fortnight. Mr. Squire, of the Hospital for Skin Diseases, London, employs a much smaller sharp-edged spoon than Volckmann's, namely, one of about one-quarter the size of Volckmann's, and also another spoon of about one-sixteenth the size of Volckmann's, for the purpose of enabling greater precision to be obtained in the draughtsmanship of the operation, and so greater conservation of the skin of the face (the commonest situation of lupus); and yet the small spoons are found by him to be sufficient for dealing in detail, even with an extensive area of the disease. Then Mr. Squire, in place of the puncturation of Volckmann—which is rather an uncertain operation as regards uniformity in the effect produced—prefers to scarify the skin with regular linear parallel incisions, spaced uniformly, about one-sixteenth of an inch apart. At each successive scarification he veers the direction of the parallel incisions, so that each succeeding set is oblique to the direction of the preceding set. The instrument used by Mr. Squire for this purpose is an ordinary cataract needle, the head of which is, however, about four times the usual minute size. Then, for insuring uniformity in the draughtsmanship of the incisions, Mr. Squire prefers to effect anæsthesia of the affected skin by freezing it, rather than by the administration of chloroform, since, if frozen,

the skin does not bleed when cut. In this manner the accurate and regular draughtsmanship of the incisions is not defeated by a flow of blood from the very first cut.

Case.—A girl, aged twenty-two. Duration of disease on admission to hospital, two years and nine months. The disease affects the whole of the lower third of the nose, including the alæ and the under surface of that feature, and extends upward into the nostrils for a short distance along the lining mucous membrane. The affected surface was covered with a thick greenish scab, which, on detachment, disclosed soft, pale, flabby, uneven granulations, discharging an ichorous pus. In this case, with a view to conservation of tissue, scarification alone has been employed, with, as yet, a most satisfactory result, the tissue having become firm, even, and non-discharging. Although it is still reddened, the sore has quite skinned over with a thin cicatrix, and no additional loss of tissue has eventuated.

The Relations of Hysteria to Nymphomania.

This subject was discussed in a paper by Dr. T. W. Hime, of Sheffield, in the British Medical Association. He laid stress on the groundlessness of the widely spread opinion that erotism lies at the bottom of most cases of hysteria, and that marriage is the only remedial means wished for or required by the patients. In proof of this, Dr. Hime referred to hysteria in married women, with large families, and to the fact that hysteria may not only exist in the young girl before a trace of sexual feeling has been aroused, and in elderly women between sixty and eighty, but may be found in men. Further, the majority of cases of hysteria offer not the least disturbance in the sphere of the genital organs; and, in support of his own experience in the Sheffield Hospital for Women, he quoted, among others, Amman, who found, among 1040 patients of the poorer and richer classes, only 30 per cent. suffering from abnormalities of the genital organs. Further, of female patients in general suffering from diseases of the genital organs, a large proportion do not suffer from hysteria; and, in the more serious cases of disease, *e. g.*, carcinoma, etc., hysteria is an exception. He explained hysteria as a neurosis, but not of any limited area, being rather the result of a peculiar form of nervous constitution, which, under favorable conditions, would explode in hysterical manifestations. Anæmia, chlorosis, uterine and ovarian disease, and other commonly assumed causes, are really but the shock producing the explosion in the already prepared hysterical body. Such diseases may exist to any extent without a trace of hysteria, and most commonly do. As in the case of all neuroses, heredity plays a most important part in forming a constitution suitable for developing the disease, and not actually in transferring the disease; and the hysterical mother, through the fatal influence of her own example, is doubly liable to have

hysterical children; for imitation is a fruitful source of hysteria, and not only the actual outbreaks in a mother are thus liable to affect the child, but her personal influence over the general management of her children is likely to produce the same unfortunate effect. The ordinary mode of education of girls was regarded by Dr. Hime as conducive to the same end, being unhealthy and artificial, and especially when combined with the utterly objectless life of the vast majority of women of the upper classes. Superficial and useless as the education usually is, it is but too generally, if any object at all be kept in view, guided with a matrimonial instinct; not, indeed, so as to make healthy and useful wives and mothers, but to make the pupils "attractive" (to use the conventional term) to the male sex.

Lactic Acid as a Hypnotic.

The London *Medical Record* states that at a meeting of the Berlin Medical Society, Dr. E. Mendel read a paper on this subject. Referring to the observations of Preyer and Lothar Meyer on the hypnotic properties of lactic acid, he said that its effects when administered by the mouth, either pure or in the form of lactate of soda, were uncertain, but he had found very good results from its use in enemata in a large number of cases. The dose of lactic acid was from five to twenty grammes (seventy-five to three hundred grains), mixed with an equal quantity of lactate of soda. The use of lactic acid was especially recommended: 1. In cases of insomnia in the course of or during convalescence from debilitating disease, after hemorrhages, etc.; 2. As a calmative in the excitement of the insane; 3. As a remedy in certain psychoses, in regard to which its precise indications must be determined in the future.

In commencing a discussion on Mendel's paper, Dr. Senator said that he had used lactic acid, either in divided doses, ten grammes (one hundred and fifty-five grains) being given in the course of a day, or in single doses of five to ten grammes in sugared water, or as lemonade. With the first-named mode of administration no weariness was observed. On the other hand, a large single dose produced pure weariness, although lactic acid could not be compared, as regarded strength and duration of action, with morphia or with chloral hydrate. There was, however, a troublesome after-effect, which had not been noticed by Mendel, nor by Lothar Meyer, the occurrence of rheumatic pains; these he had observed twice, once in a phthisical patient, the other time in a man who had frequent attacks of muscular rheumatism. Rheumatic pains had also been observed in giving lactic acid with other objects, such as the treatment of diabetes, etc. The occurrence of rheumatic pains after the use of lactic acid was of importance in regard to the theory of articular rheumatism, and he asked whether Mendel or Meyer had observed anything of the kind. Mendel answered in the negative. The

doses used by Senator were too small; at least fifteen grammes should be given. He agreed with Senator that lactic acid was inferior to morphia and chloral hydrate.

Treatment of Acute Albuminuria.

In the *Practitioner* for August, Dr. De Haviland Hall relates the experience he gained as Resident Medical Officer at a large dispensary during an epidemic of scarlet fever (about three hundred cases), in which dropsy was a frequent sequel.

At first the patient was ordered the perchloride of iron, and was allowed no solid food except a little bread and milk, and as much water as he liked to drink. The skin was also kept gently acting. If, however, the urine was nearly or altogether suppressed, or if uræmic symptoms appeared, all food was forbidden for two days, the child had nothing but water and a drink of cream of tartar (3j ad. Oj), in sweetened water, with a little lemon juice. If at the end of this time the kidneys began to act, a little milk was allowed, but not more than a pint in the twenty-four hours; if, however, the uræmia continued, with little or no urinary secretion, the water and cream of tartar were persevered in, and in severe cases nothing else was given for thirty-six hours. Dry cupping, mustard poultices over the loins and a purgative were the only additional remedies ever employed. "The explanation of the good effects of abstinence from solid food, and especially meat, is, that a patient is entirely deprived of nitrogenous food, the work of the kidney is less, and the urine is rendered less irritating, while the mild diuretic action of the cream of tartar seems to be useful." Dr. Hall also observes that Mr. Churton has reported some cases of puerperal convulsions which were treated by keeping the patient almost entirely deprived of food (?).

Dr. Hall sums up his treatment of acute Bright's disease in the following words:—1. Milk and water, with arrowroot; no solid food. 2. Mild diuretics, with a free supply of water. 3. The skin kept just moist. 4. A daily evacuation of the bowels.

Carbolic Acid in Diabetes.

Quoting from the *Medicinische Wochenschrift*, the London *Medical Record* states that Dr. Fischer, of Breslau, asserts that in Germany the number of diabetic patients is very much on the increase. This fact he attributes to the mental excitement due to extreme and sudden political changes, and to rapid alternations in social position. The author holds, with Seegen, that diabetes is an affection of the nerves, commencing in nerve lesion, and terminating in physical disturbance. He has also been struck with the frequent association of diabetes with cardiac disease, particularly with that form in which the muscular tissue of the heart is affected, together with the valvular apparatus. It often occurs that surgical affections, such, for instance,

as tumors, necrosis, and caries of bone, etc., met with in diabetic patients, are of such a nature as to render surgical operation necessary or desirable. The use of the knife, however, in such cases is very dangerous, as, according to general surgical experience, the smallest wound in a diabetic patient is usually followed by severe, extensive, and frequently fatal gangrenous inflammation of the subcutaneous cellular tissue. Such inflammation, indeed, is often developed without traumatic cause in the subjects of advanced or overlooked diabetes. When an operation is urgently demanded, as in case of rapid growth and breaking down of a tumor, it becomes the duty of the surgeon to apply, if possible, some treatment that may improve the condition of his patient, and favor the chances of a successful result from his operation. The author, with this object in view, has lately carried out the carbolic acid treatment recommended by Ebstein and Müller; and he reports that, if this agent be administered internally in small and frequently repeated doses, it will in a short time cause a considerable reduction in the amount of sugar in the urine, and permit the surgeon to perform his operation with the ordinary chances of success. The use of carbolic acid should, it is stated, be kept up during the after-treatment, and not be discontinued until the wound formed in the operation be quite closed.

Ozone an Active Poison.

The *Scientific American* says that the eminent French chemist, P. Thénard writes as follows in regard to the effect of ozone, or active oxygen, on the animal system. "I believe," says he, "that it is high time that the attention of the public, and even of the learned, was directed to the widely spread errors in regard to the action of ozone on the system. Far from being a remedy, it is rather one of the most energetic poisons that has been prepared in our laboratories, and the serious accidents which have occurred in my own leave no doubt of it. I will not enlarge on its physiological action, since A. Thénard will soon publish an article on that subject; but will only give prominence to the fact that, under the influence of ozone, even when greatly diluted, the blood corpuscles rapidly contract and change their form, the pulse becomes slower, so much so that a guinea pig with a normal pulse of 148, after being kept fifteen minutes in a weak ozone atmosphere, had the pulse reduced to one-thirtieth. At the present time, when an accurate method of measuring temperature is of great assistance in medicine, ozone may possibly prove a means of preventing too great a rise of temperature; but inconsiderately disseminate ozone in inhabited places, in the delusive hope of destroying a miasma, would be very dangerous. If our strongest poisons furnish in certain cases our best remedies, we must first learn how to use them, so as not to make a mistake in the time of giving or in the dose.

Then, is it certain that ozone does exist in the atmosphere? Its presence there is proven by means of colored paper, the color of which changes more or less in contact with the air. But who knows that there is not some other substance present in atmospheric air, which can modify this paper in the same manner as ozone? Wittmann passed a stream of air through the flame of a glass-blower's lamp, and obtained a kind of air which acted upon the so-called ozonometric paper (starch and iodide of potassium) just as ozone does; but while this air disinfected badly smelling water without making it acid, ozone does not disinfect, and does make it acid. Moreover, it is well known that ozone cannot exist at a temperature of 392° F. (200° C.), while this modified air of Wittmann's was exposed to a temperature at which glass softens."

Congenital Absence of the Patella.

Translated from the German, by John B. Roberts, M. D., of Philadelphia.

Dr. W. Körte reports two cases of this deformity that were presented at the Strasburg clinic. The first was a girl, two and a half years old, who could neither stand nor walk, on account of the malformation of the lower extremities. The limbs were flexed at the hips, and could be pushed upward upon the trunk until the feet lay upon the neck; the femurs were movable in the acetabula, and could be tolerably well rotated, but extension of the hip-joints was impeded. The thigh muscles, except the adductors, were relaxed; these were contracted. The left leg was rotated inward, the right outward. Slight passive motion of both knees was permitted, but voluntary movement was almost impossible. The condyles were completely developed, but the intercondyloid fossa was empty; and, though the tendon of the four-headed extensor could be felt sliding in the groove, no mass like the patella could be found. The tendines Achillis were contracted, and the muscles of the leg atrophied. The upper extremities were poorly developed, and the forearms and hands were strongly pronated. The hands and fingers, being flexed, were almost useless. Electricity, orthopædic exercises, and tenotomy of the tendons of Achilles were employed without much benefit being derived.

The second case was a child who entered the clinic for congenital contraction of both knee-joints. The knees were drawn up toward the abdomen, and were strongly flexed. The feet were extended; in one there was moderate supination, and they were laid one over the other. The child held the limbs in the position described, and sometimes moved them a little outward, the slight movement being performed in the hip-joint. The flexion at the hip could be overcome by force to some extent, but considerable resistance was soon offered to further attempts at motion. The knee-joints could likewise be moved a little out of their

condition of flexion, but the hamstring tendons soon became tense. It was not possible to flex the feet on the legs. The muscles of the thigh were poorly developed, but the quadriceps extensor especially so. In the intercondyloid notch the tendon could be felt, but there was no patella, either in the fossa or upon either condyle. The upper portion of the child was normally developed. Under daily baths, orthopædic exercises to overcome the deformities, electricity, and tenotomy of the tendons of Achilles, aided by plaster dressings, there was produced essential improvement in the course of about four months. The thighs and legs could be extended to an obtuse angle, muscular contractility was increased, and the child could make voluntary movements of the limbs. Instruction was accordingly given the mother to continue the orthopædic exercises, and the patient was discharged. Dr. Körte has been able to find recorded only five similar cases of absent patella.—*Deutsche Zeitschrift für Chirurgie*, Bd. vii, 69, *Leipzig*, 1876.

On Rheumatic Gout.

In the last edition of his work on gout, Dr. A. B. Garrod reviews this disease, which he says is not a hybrid:—

Rheumatic gout is not a blend of gout and rheumatism, but something distinct and *sui generis*. It is closely associated with debility, and its treatment must ever be restorative. It may be very localized, or it may involve the articulations generally. Its morbid anatomy was carefully studied by the late Dr. R. Adams, of Dublin, whose descriptions admit of no improvement. It is not so associated with heredity, age, or sex, as gout, and is common in women. It is not confined to those who take alcohol. It is found along with skin affections not uncommonly. "It is a much easier task to prove what rheumatized arthritis is not, than to prove what it is. It appears to be a peculiar form of mal-nutrition of the tissues of joints, accompanied with defective powers." The treatment closely resembles that of atonic gout, both generally and locally. Guaiac, arsenic, iodine, iron, and cod-liver oil are all of value. Mineral waters and baths are often useful, but baths may be taken to excess and so do harm. The diet should be nutritive, and stimulants, even malt liquors, are not contra-indicated entirely. The diagnosis is given elaborately. The work concludes with the sentence, "Some time ago I was inclined to take a very desponding view of the amenability of this disease to treatment, but year by year I have become more hopeful, and I have frequently seen patients who I feel sure if they had submitted themselves to a rational course of steady restorative treatment, instead of being led by the solicitations of injudicious friends and empiricizing advisers to give themselves up to every form of quackery, would have been restored to health instead of becoming, as many of them unfortunately do, miserable and incurable cripples."

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D. G. BRINTON, M. D., EDITOR.

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THE RELATION OF THE MEDICAL PROFESSION TO SOCIETY.

In contemplating the numbers, the education, the social position and the direction of the labors of the medical profession, every thoughtful mind must become impressed with the enormous influence it is destined to exert in the future of the race. Its peculiar study is *Man*, and he has no relation to his fellows, to his environment, or to history, which it does not become imperative upon the physician to study, and this with a view to alter and direct the future.

For example, we have more than once called attention to that "*natural history of crime*" which has been so ably outlined by Professor AUSTIN FLINT, and pursued by Dr. MORITZ BENEDIKT within the last year and a half; or we can refer to those studies in heredity and atavism which invest genealogy with a new and broad significance, and supply entirely new norms for the estimate of human motives; or to

the late researches in archebiosis and the differentiation of species which, united with the study of mental pathology, have already reversed the whole procedure of metaphysical reasoning and supplied a different basis for ethics.

Though probably disease has not been diminished, nor yet will be in any material degree, *tolerance of disease* has been vastly increased, and the average duration of life has been very considerably prolonged. The sociological results of this will prove most momentous. "Time and I," said Philip the Second, "against any other two," and it is certain that in modern society a long life properly employed insures wealth and power toward its close. With the general increase in the duration of life, with the growing "betterment of risks," to use a life-insurance expression, it will become more and more rare for young men to inherit fortunes or gain positions of power, for their fathers and uncles will continue in life. Hence, the social forces will more and more come under the control of age and experience. Fortunes will be more rarely squandered, dissipation will be proportionately lessened, rash youth will more rarely hold the helm.

To be sure, this is not an agreeable prospect to those who believe that the moral and intellectual faculties commence their decay in middle life. But these may find some comfort in the undoubted fact that intellectual culture materially aids in securing long life, and that the most intelligent, those who exercise constantly and wisely their brain power, have the best chance to outlive the others, and thus get control of the social tendencies. Dr. WILLIAM B. NEFFEL, in a paper on Melancholia, published last year, makes the following pregnant remark: "That idiots do not live long is an established fact; but it is, perhaps, less known that even the physically strongest persons, the athletes, if not intellectually developed, seldom, if ever, reach an advanced age, and that the oldest persons in any country are generally also the most intelligent."

With the growing recognition of the value of life comes the desire to defend and prolong it; and hence the profession which makes this study its avowed object must become more highly cherished as time passes. This was well put by Mr. GLADSTONE in an address he delivered this summer at the Medical College of the London Hospital. He observed, looking to the future, that in proportion as man's enjoyment increases, so will his sufferings, and the necessity for help to relieve those sufferings. It was thirty years since he delivered an address at the Middlesex Hospital, and at that time he was impressed with the altering structure of society, the constant development that it seemed to undergo, and the effect of all this upon the physical and material, as well as upon the mental life. Even then he ventured to say that the importance of the medical profession, which at that time had grown so largely, would still grow in increasing proportion. Looking back across the intervening years, he could say that his anticipations had been fully realized. The public began to comprehend that the medical profession laid no claim to what he might call cabalistic methods—that was to say, it did not depend upon formulæ, but relied upon experience, endeavored to track the truth, and followed the laws of common sense. That profession presented a future of the highest interest. And he believed it would, most probably, in that future gain increased influence, in greater proportion than other professions would. The legal profession, for example, possessed now no larger social influence than they enjoyed fifty or one hundred years ago. But with the medical profession, as pointed out above, the development of disease and the physical habits of life tended to widen its sphere and increase its influence.

This is sound reasoning, and it comes in this instance based on personal observation of society in one of its most cultivated centres.

NOTES AND COMMENTS.

Therapeutical Notes.

FORMULÆ FOR SKIN DISEASES.

The following are some of the formulæ at present in use in several of the London hospitals for diseases of the skin:—

For Acne.

R. Glycerinæ, ʒj
Aquæ calcis, Oj. M.

For Pediculi.

R. Slaked lime, aa ʒiv
Sulphur, ʒxxxv.
Water,

Boil and evaporate to a pint.

For Alopecia.

R. Liq. ammon. fort., aa ʒj
Spir. vini, rectific., aa ʒss
Tinct. cantharid., ad. Oj.
Glycerinæ, ad. Oj.
Aquæ,

Use as a liniment.

For Palmar Psoriasis.

R. Ung. hydrarg., ʒj
Creasoti, m.vj. M.

For Eczema.

R. Plumbi acetatis, aa gr.x.
Hydrarg. chlor. mitis, aa gr.x.
Zinci oxidi, aa ʒj
Ung. hydrarg. nitratis, aa ʒj
Adipis, aa ʒss. M.
Olei palm.,

Make an ointment. A tar lotion is also used.

For Tricophyton.

M. Lespian (*La France Médicale*) advocates the use of a combination of 15 grains of tannin, 2½ drachms of tincture of iodine, and 5 drachms of glycerine, as a local application in this disease, the crusts being first softened by wads of cotton wadding or charpie soaked in olive oil in glycerine. If the disease is not very extensive, a cure is effected in a few days.

Napheys' Modern Therapeutics.

We take pleasure in announcing that the fourth edition of this valuable work will be ready early in November. It has been entirely rewritten and enlarged, embracing surgical as well as medical therapeutics. In size, it has grown to a large octavo of more than six hundred pages. The practice of more than three hundred of the most eminent living physicians and surgeons is represented in its pages, not

only by definite therapeutical directions, but by the precise formulæ they employ, numbering near 2000 in all. Many of these prescriptions have never before been published, the author having obtained them in the hospitals of this and other countries, and through personal relations with representative professional men.

As in previous editions, the arrangement is the nosological one. Under each disease the reader will find the treatment for it recommended by from two to ten of the most eminent clinical teachers of the day; and following that a *résumé* of the remedies which have received the highest encomiums for their efficacy. The latter is a new feature of great interest.

The price of the work, handsomely bound in cloth, is *four dollars*, for which it will be sent post-paid to any address by the editor of this journal. A copy of it is also offered as a *premium* (mailed post-paid) to any subscriber to this journal who will send us a renewal of his own subscription along with *two new subscriptions* (the remittance to be \$15.00). Agents who would present it prominently to the profession can have it on favorable terms.

The Brains of the Insane.

"A noteworthy observation has been recorded by Dr. L. Meyer in the *Archiv für Psychologie*. He studied the internal carotid in the brains of insane persons, believing that long-continued and intense disturbance of its peripheral circulatory channels—the convolutions of the cerebrum—must react on the condition of the trunk of the vessel itself. In all cases which the author investigated, he found the changes above referred to. In the thirty-one observations given, disease of a local sharply-defined area of the internal carotid was observed. The disease extended from the origin of the vessel, almost always surrounding it in a circular form, extending for eight millimètres to almost one centimètre upward, and ending there suddenly and sharply defined. Upward these limits were never surpassed, but sometimes the lesion extended lower, passing even into the common carotid. The changes consisted in arteriosclerosis, generally in its later degenerative stages, mostly in the form of circular calcification. Further, and chiefly at the lower margin of the altered area, there was a change in the arterial wall, which on microscopic section was seen to be due to simple thinning of the tunica media, whilst the intima remained intact. Thus

partial dilatations of the vessel were formed. Frequently, however, the whole diseased part was dilated, and in eight cases distinct aneurisms were found, which considerably exceeded in size the circumference of the common carotid.

Comfort for Diffident Speakers.

Prof. William Fuller, M.D., of Bishop's College, Montreal, says, in the *Canada Medical and Surgical Journal*:—A nervous person on attempting to act or speak is affected by a violent emotion which produces a spasm of the cerebral vessels, his heart beats violently, his face is pale, the index of the condition of his brain, and the words come forth slowly and with stammering, or he becomes confused and forgets entirely what he intended to say. It is not until symptoms of reaction set in, or, as the popular phrase has it, "until he gets warmed up," that fluency and ease is acquired. I have found a minute dose of morphia or a few whiffs of ether useful in this most embarrassing condition. Let me add the caution that too large a dose produces the opposite condition of the vessels, quite as fatal to a successful result.

The only objection is that reliance on this means may lead to a dangerous habit.

Hydrophobia.

F. Herrmann states, in the *St. Petersburg Medical Zeitschrift*, 1875, that from 1863 to 1874 there were bitten by dogs 2724 people in the city of St. Petersburg. Of the dogs, 198 were mad, and 103 were suspected of having rabies (?). Twenty-five out of the whole number of persons bitten became affected with hydrophobia: furnishing 12.6 per cent. among those bitten by undoubtedly rabid dogs, and 8.3 per cent. of such as were bitten by suspected dogs. In the Obuchoff Hospital 81 bitten persons were admitted during the same period; six of these (7.4 per cent.) became affected with hydrophobia, and sixteen more cases of byssa, already developed, were received at this hospital, making twenty-two cases in the twelve years. The majority of the cases were due to the bite of dogs, but in three cases the poison came from dead wolves, and in two from rabid cats. In support of the view that the bite of human beings in this condition seldom communicates the disease, the author gives three examples observed by himself. The period of incubation in the majority of

cases amounted to five or six weeks; the maximum was 135 days.

As a rule, autopsies gave negative results; in solitary cases there was congestion of the brain, spinal cord and their membranes, also a circumscribed softening of those organs. Furthermore, glandular swellings were many times found in the breast, neck and throat, and, finally, in one case there was coagulated blood found in the sheath of the vagus, at its cervical portion.

In prophylactic treatment the knife was used successfully, as also energetic cauterization with the hot iron, or powerful caustic applications, among which caustic potassa and butter of antimony are recommended. No fully developed case was cured.

Among the well known methods of treatment which were applied without success may be mentioned phlebotomy, Russian vapor-baths, and the hypodermic injection of atropia and curare. Newer methods were also tried, partly with a temporarily palliative result; these were the subcutaneous injection of ammon. arsen. and of carbolic acid, also the injection into the veins of ammoniac liquor (from the analogy to snake-bite). Continuous narcosis with chloroform, and the chloral hydrate enemata have best preserved their reputation as palliative remedies.

Diseases of Workers in Lead.

At the meeting of the British Medical Association, Mr. W. Holder, M. R. C. S., offered a paper on the effect of lead-inhalation and absorption amongst lead workers—more especially among the workers in white lead manufactories, in whom its deleterious results are seen in great intensity. The author mentioned cases, in one of which amaurosis and paralysis were the result of but a few months' labor in a lead-mill; in another deafness, decay of the teeth, paralysis of the arm, and a general breakdown of the whole system, resulted. He stigmatized this poisoning as perhaps the most baleful of all trade-diseases, as it was slow to kill, and its tortures were prolonged. The investigations of Barton, Fletcher, Andral, and others, were mentioned. The author considered that lead acted locally by absorption upon the tissues. The pathology of lead-poisoning was discussed. The yellow degeneration of the muscle was ascribed rather to disuse and general anæmia, than to the mixture of lead with the tissue.

The treatment recommended, after the usual administration of diluted sulphuric acid, was extract of belladonna, with the Turkish bath, precipitated sulphur, and generous diet. Faradization should be persisted with for a long time. In chronic cases, iodide of potassium should be given in large doses. The author, whilst considering the remedies efficient and sufficient for acute cases, deplored the scanty opportunities of giving relief in the more advanced and chronic cases.

Salicylic Acid.

Professor H. Kohler, of Halle, states that all the remote therapeutic effects of this remedy may be obtained by administering its salt, the salicylate of soda. The latter is not an antiseptic, and where such is desired, the acid itself must be used. To prevent zymotic action in the blood it is of little or no use, as the acid enters the circulation only in the form of salicylate of soda, which latter has no anti-zymotic virtues. The salt is a most powerful febrifuge, and is by him regarded as even better than quinia in this respect. It will reduce the temperature in fevers with remarkable uniformity, and is very much more convenient to administer than the acid. In rheumatic fever it acts admirably, but is not so good an antiperiodic as quinia in malarial diseases.

CORRESPONDENCE.

THE CENTENNIAL INTERNATIONAL EXHIBITION.

Letter XIV.

Medical Batteries in the United States Exhibit.

CENTENNIAL EXHIBITION, Oct. 14th, 1876.

ED. MED. AND SURG. REPORTER:—

Electro-therapeutics is now attracting so largely the attention of the medical profession, that we seek with great interest to discover what our Centennial Fair has to offer in this department. The medico-electric display of the United States, to which I shall at present confine my remarks, is of superior quality, although not as extensive and varied as might be expected; many of the instruments on exhibition claiming novelty, being reproductions, with but slight modifications, of other apparatus.

Electric apparatus of all kinds are chiefly found on or near aisle N, and between columns 55 and 56.

Traveling from east to west, I came first upon the interesting display of Flemming

& Talbot, of 814 Filbert street, Philadelphia. The exhibit of this enterprising firm is contained in a pavilion, handsomely painted and draped, and surmounted by a small dome and figure of Atlas. Having had a large experience in the use of batteries manufactured by these exhibitors, I can heartily recommend their apparatus to the notice of the profession.

Attention is first attracted to a splendidly finished cabinet battery. It is made of carved and polished walnut, and has the general appearance of a handsome desk, surmounted by a glass case. On each side below is a closet, which incloses hinged drawers, in which are placed the battery cells. Above each closet is a drawer for electrodes and other appurtenances. The cells are connected with the various contrivances for utilizing, modifying, and altering the current, on the table above, by concealed wires. The apparatus of this table or keyboard is nickel-plated and very attractive, and includes appliances for both the Faradic, or interrupted, and the galvanic, or continuous current.

Flemming & Talbot have lately added an improvement to the Faradic portion of this table apparatus, which is found in the battery on exhibition. It consists of a new contrivance for moving back and forth the secondary helix. Connected longitudinally with this helix or secondary coil is a toothed bar in which works a toothed wheel, which is attached to a vertical handle. By simply giving a slight turning movement to this handle with the finger and thumb, the coil can be slid in or out as may be desired.

The contrivance for producing slow and rapid interruptions will be described when I consider the separate Faradic battery of this firm.

They also exhibit an *Office Table*, designed to be connected with a permanent cellar battery. This table is similar in general construction to the cabinet battery which I have just described; but has not, of course, the closets for the cells. Both the cabinet battery and the permanent office table are elegant articles of furniture for a physician's office. The latter is in considerable use among the specialists and semi-specialists of Philadelphia and other cities, and gives general satisfaction to those employing it. It is as elaborate but not as complicated as some of the German apparatus in use in this country; but it is as well, or better, adapted for the purposes of the medical electrician and general practitioner.

Flemming & Talbot also display a new improved portable, constant-current battery. Its cells are arranged in sections, and in such a manner that any section can be used independent of the others, or the whole can be put in action together. The cells are covered by a hydrostat, or sliding board, to prevent the fluid from spilling. An important improvement consists in the presence of a door in front and below, by means of which the condition of the cells can be readily examined at any time, or

by which they can be withdrawn without removing the plates above. The necessary attachments are situated in the cover of the box. The rod, by drawing up which the cells are put in action, answers also the useful purpose of a "gentle reminder" to the physician that his battery must not be thus left, as the lid of the box cannot be shut until this rod is pushed down and the liquid removed from the zinc.

Another portable constant or continuous current battery is the well known and excellent Stohrer instrument, improved by Flemming & Talbot. Its cells are made of hard rubber. The elements are attached to brass plates on top of the case, and are numbered 2, 4, 5, 8, etc. Instead of using a slide to bring into action the number of cells desired, a connecting pin is inserted in a hole in the plates. This contrivance is not so likely to get out of order as the slide.

Flemming & Talbot's Faradic battery, also on exhibition, is one of the best that I have yet seen. The illustration herewith given will afford a general idea of its construction.



It has a current interrupter or rheotome, for both slow and rapid interruptions, an ingenious and useful piece of apparatus. The rapid interruptions are made by an ordinary vibrating spring; the slow, by a long lever swung horizontally, and adjustable by an inclining ring, which regulates the lever's range of vibration. The contact lever is the same for both interrupters, which are at right angles to each other. It is mounted so as to move horizontally in the angle between the two springs, and can be rapidly swung from one to the other by a simple movement of the finger. Oscillations as slow as one per second can be obtained with this instrument. It is also provided with a commutator, or polarity changer, scales by

which the primary and secondary currents may be graduated to the utmost delicacy or greatest power, and with a new galvanic cell. This cell, which is charged with a solution of bichromate of potassium, is so made that when not in action the zinc is raised out of it altogether and the aperture through which it passes covered by a rubber hydrostat, making the cell perfectly fluid-tight, and saving both the fluid and the zinc from the effect of splashing in transportation, or of immersion in case of an upset. By this plan, also, the cell can be filled nearly to the top and the zinc be made twice the usual length; it will thus produce a stronger current and last a longer time.

They display a small faradic coil with an independent battery, in a Russian leather case, a neat and portable apparatus.

Among their exhibits I observed, likewise, Dr. Flagg's dental helix, with water tube rheostat, an instrument which gives a remarkably smooth and delicate current, and to whose efficacy in dulling pain during the extraction of teeth I can testify from personal experience.

Finally, they present, in a large glass case, electro-medical appliances of all kinds, comprising rheotomes, bougies, electrodes, etc.

The display of this firm is well worthy of attention, and it is a credit to themselves and to Philadelphia.

The Western Union Telegraph Company, at No. 53, have an immense and beautiful display of electric apparatus for telegraphic purposes, which, however interesting to electricians in general, does not especially claim the attention of the medical profession. Mr. T. P. Scully, of this company, however, exhibited to me a cautery battery, the invention of Dr. J. Byrne, of Brooklyn, which is well worthy of notice. Its elements are zinc and copper, but the copper is plated with platinum, and also platinized and backed by lead. The exciting liquid employed is the ordinary bichromate of potassium solution, or dilute sulphuric acid. The battery is composed of four small cells, only twenty-two inches of metallic surface being exposed to the action of the solution. Its electro-motive force is claimed to be greater than that of any other battery; and for cautery purposes it is said to be unequalled. It can also be used for torpedoes, electro-plating, etc. It will heat eighteen inches of number 18 copper wire to incandescence. Mr. Scully stated that Sir William Thomson had examined it while going the rounds of the Exhibition, and had pronounced it the best instrument of the kind which he had seen. He gave practical illustration of his admiration by ordering one.

Just west of the "Western Union," at No. 60, is the large and attractive exhibit of the Western Electric Manufacturing Company, of Chicago. This also is chiefly a non-medical display, consisting mostly of telegraphic apparatus, railway signals, harmonic instruments, etc. The principal medical exhibit is an *Electric Bath*. The bath tub has arranged along

its sides a number of metallic discs or knobs, which correspond to the various parts of the patient's body—leg, thigh, arm, head, etc.—and is connected with an elegantly finished induction apparatus, the whole so constructed that the operator can turn the electric current upon any portion of the body.

This Company likewise presents a galvanic cautery battery, so arranged that four, eight, twelve, or sixteen cells, as may be desired, can be brought into service. These pieces of apparatus are quite handsome; but the batteries appear to me to be much larger than necessary for the ordinary purposes of the physician. Any kind of electric work is done to order by this firm in the very best style.

I purposed in the present communication to describe the interesting electro-medical exhibits of several other American establishments; but I will have to defer their description to another time, as my letter has already grown to sufficient length. Yours, C. K. M.

Notes of an Epidemic of Diphtheria in Tennessee.

ED. MED. AND SURG. REPORTER:—

An epidemic of this disease has prevailed in this community from the latter part of July until now, October, being attended with considerable mortality. This was its first appearance since its recognition as a specific blood disease, though, under the name of "putrid sore throat," it had evidently been here before. Nearly every individual in the community was more or less under the influence of the poison, the cases ranging from mild to malignant, children and nursing women being the chief sufferers; a few infants were attacked. The attack began with a rigor, followed by high fever in many cases, with one or both tonsils more or less tumefied; in a few hours false membranes appeared on these and extended to the arches of the palate, and thence posteriorly to the pharynx; the latter presented the appearance of a cut of fat steak at first.

These were the grave and malignant cases, and required heroic treatment from the outset, the routine chlorate potash and tincture ferri being too slow in their action. We soon found, to our sad experience, that the diathetic treatment was not active enough, and resorted to heavy doses of quinine, three to five grains every two hours to children, and eight to ten for adults, until the pulse came down or diaphoresis was established, the effect being maintained by large doses at longer intervals. The point aimed at was to reduce the local congestion before the parts had become solidified by interstitial deposits, and no other remedy with which we are familiar can accomplish this so quickly as the great anticongestive, quinine. I recall several cases in which one to two drachms were used before even cinchonism was established. Locally we used a saturated solution of persulphate of iron, in water or glycerine, applied with a soft mop of cotton once or twice a day. This removed the

false membrane more quickly than anything we tried, though we used sixty-grain solutions of nitrate of silver, carbolic and salicylic acids, chloral, etc. Chloral in saturated solution had a good effect, but was quite painful for a few minutes; it corrected the disgusting fetor about as well as anything we tried. Tracheotomy was not resorted to in any case. Before closing, we will mention, among the symptoms, the occurrence of black vomit in two cases, one of which recovered.

We forgot to mention in the proper place that we used calomel and soda in a number of cases as a purgative. Dr. Malone, of Gallatin, Tennessee, informed me a few days since that he relied on this combination, in alternative doses, for one or two days, using locally persulphate of iron, and had not lost a case out of a dozen so treated, though, from the small number of his cases, the epidemic evidently had not much malignancy about it. E. L. DRAKE, M. D.

Fayetteville, Tenn., October 12th, 1876.

[To produce cinchonism with the utmost promptitude was first recommended in diphtheria, by Dr. Von Sweringen, of Indiana. Calomel and soda has been highly extolled by Dr. Duer, of this city.—ED. REP.]

Case of Supernumerary Fingers, Hereditary.

ED. MED. AND SURG. REPORTER:—

The power of hereditary influence is often vividly presented to the attention of the practitioner. This is seen not only as a causative element of disease, but moral and physical defects are often transmitted in a wonderful degree. Six hundred criminals have been traced as springing from one prostitute. I have read of each member of a large family born with six fingers on each hand, and six toes on each foot. I recently delivered a negro woman of a hearty female infant, which had six fingers on each hand. The mother informed me that her own father, herself and her first child were born with the extra fingers, on both hands, except the first born, which had only one hand thus deformed.

On one hand of the infant the finger existed as a rudiment—a sort of a knot or bud. On the left hand two phalanges were perfect, joint, tiny nail, etc. The third phalanx was represented by a ligamentous cord, by means of which attachment was made to the outer surface of the little finger.

According to Gross' "Surgery," a supernumerary finger is uncommon, while it is by no means rare to see an additional thumb. He says in the majority of cases the attachment is through the medium of a separate joint, having a distinct synovial membrane, and that cutaneous attachment occurs only in a minority of cases. In each of the four cases referred to above, the attachment was by a cord, representing the third phalanx. In the Mobile Medical Society, lately convened, "Dr. W. H. Ross

reported the case of a negro girl who had six fingers on each hand. The father and mother both had suffered from the same deformity. The supernumerary fingers were removed by Dr. Sealer quite readily, being merely attached to the hand, as is the usual case, by a ligament."

C. C. VANDERBECK, M. D.

Philadelphia.

The Priority of the Use of Quinine in Pertussis.

ED. MED. AND SURG. REPORTER:—

The sixth volume of "Ziemssen's Practical Medicine" came to my office this day, from the publishers. On looking over the article on whooping cough, page 727, the credit is given to Binz of first giving quinine in Pertussis. He relied on the theory that whooping cough depends on some form of fungi, and quinine in experiments kills the spores of fungi. Now, whether this opinion be correct or not, it was not with that intention that the New York physicians employed the article, but on account of its well-known antiperiodic, antispasmodic, febrifuge, and nerve-tonic properties. The German has given it in larger doses than we have given it—to a child five years old nine grains twice a day. I think five grains to a child of that age sufficient. In my experience, if quinine does not relieve in five or six days, it will not do much good by longer continuance. It perhaps relieves the patient in whooping cough, as it does in asthma. I often prescribe it in cases where the patient would be aroused from sleep at a certain hour of the night, with an attack that would last for an hour or two. From ten to twenty grains of quinine, given at bedtime, will, in many cases, prevent the attack. Dr. Reynolds, of London, must be unaware of the experiments of the Germans, or of its use in this country for many years past, because he speaks of its being original with himself. JOHN BURKE, M. D.

New York, Oct., 13th, 1876.

NEWS AND MISCELLANY.

Electricity and Nervous Diseases.

We have received the announcement of a special course of lectures on Electro-therapeutics and Nervous diseases, to be delivered by Dr. Charles K. Mills, at the Philadelphia School of Anatomy and Surgery, 1022 and 1024 Hunter street, above Market and between Tenth and Eleventh streets. The course will include one lecture on Dental Electro-therapeutics. The lectures will be illustrated with apparatus and cases, and private practical instruction in Electro-therapeutics will also be given. Introductory lecture, to which all are invited, Saturday evening, November 11th, 1876, at 7½ o'clock. The lectures will be continued thereafter at such hours as will suit the class. Fee for the course, \$10.00. Any one desiring infor-

mation is requested to apply at 1011 Walnut street, on Tuesdays, between 9 and 10 A. M., or to Charles K. Mills, M. D., 1502 Columbia avenue.

Wm. R. Warner & Co.

Have received the Centennial award for their soluble sugar-coated pills. This is the third Grand World's Fair prize that attests to their excellence over competition at home and abroad.

Personal.

—Dr. A. B. Jones, one of the oldest and most skillful physicians and surgeons in Portsmouth, O., died on the 15th inst., of rheumatism of the heart, after an illness of two days. He will be mourned by a great number of friends whom he had won by his generosity and benevolence.

QUERIES AND REPLIES.

Spontaneous Orgasms.

Dr. N. L. Folsom, of N. H., replies to the query on page 326, that he has used digitalis with marked success. He begins with ten drops three times a day, and increases the dose to sixty drops, if required.

Southern Female Institutes.

Two correspondents reply to J. G. C., on this subject, naming the Wesleyan Female Institute, Staunton, Virginia, and the Seminary of the Sisters of St. Joseph, Jacksonville, Florida.

Lister's Antiseptic Dressings.

Dr. E. A. M., of Chicago.—Prof. Lister uses the official carbolic acid. The names and preparation of his dressings are given in Sansom's work on Antiseptics, and also, in considerable fullness, in Napheys' *Modern Therapeutics*, fourth edition, now nearly ready.

Ascites.

Dr. A. M., of Ga., writes of a male patient whom he has tapped fifty-eight times since September 19th, 1875, removing 153 gallons of fluid. He asks suggestions for treatment, but fails to give a sufficiently full description for one to guess the etiology of the disease.

OBITUARY.

DR. A. G. WALTERS, PITTSBURG.

This able surgeon died suddenly, October 14th, of pleuro-pneumonia. He was a native of Prussia, and received his diploma from the University of Königsberg, 1835, and his license from that of Berlin, 1836. He came to this country in 1836, after having attended a course of lectures under Sir Astley Cooper, in London. He was a thorough surgeon, and devoted his time and energies to this branch of the science of medicine. He was a bold operator, and no case seemed too difficult for him. He had not been long in practice until he achieved remarkable success, in a number of cases, and his fame soon spread throughout the State. He was known as a leading surgeon, to the profession at

least, in all the principal cities of the United States, and his name was not unknown in Europe. He was as independent as he was bold, and would not permit the opinions of any other practitioner to influence his judgment in the least. This course of conduct placed him, as it were, outside the medical guild, and led to the impression that he was cold and unsocial—an impression quite erroneous, as he was warm-hearted and genial toward all his friends, although his acquaintanceship was much more limited than it might have been. He was always full of business, and the demand for his professional services left him little time for social intercourse or enjoyments. Dr. Walters was married to the daughter of Major John B. Butler, of the Allegheny arsenal, the lady also being the niece of Dr. Gazam, and a wife and two children mourn the loss of husband and father.

He was a frequent writer on surgical subjects. In 1867 he published a useful work on "Conservative Surgery in Badly Injured Limbs." He contributed several papers to the *REPORTER*, on "Simple Fracture of the Femur," on "Retro-Pharyngeal Abscess," etc. This summer he contributed an excellent article on Artificial Joints to the *Archives of Clinical Surgery*.

MARRIAGES.

DIBRELL—REARDON.—At the residence of Mr. E. T. Halliwell, No. 2222 Lombard street, Philadelphia, October 3d, 1876, by the Rev. T. William Davidson, Dr. James A. Dibrell, Jr., and Lallie Reardon, both of Little Rock, Arkansas.

FOX—BIDDLE.—At Philadelphia, October 11th, at St. Matthew's Church, by Rev. D. O. Kellogg, De Grasse Fox and Harriet, daughter of Dr. John B. Biddle, of Philadelphia.

HALSTEAD—FORRESTER.—On October 18th, at the residence of the bride's parents, by Rev. T. W. Chambers, Pearson Halstead and Janet, youngest daughter of James C. Forrester, M. D., all of this city.

HARVEY—KENNEDY.—At the residence of the bride's father, Tuesday, October 10th, 1876, by Rev. Eli Gifford, Chester W. Harvey, M. D., of Chicopee, Mass., and Fanny E., daughter of James Kennedy, of Tuckerton, N. J.

MILLER—DERICKSON.—At Orange, N. J., on Oct. 3d, 1876, at the residence of the bride's brother, by the Rev. H. S. Bishop, Dr. Thomas V. Miller, of Shafterstown, and Mrs. S. S. Derickson, of New York City.

PEIRCE—SAYLOR.—On Thursday, October 12th, 1876, at Schuylkill Haven, Penn., by Rev. B. K. Peirce, D. D., Dr. Henry T. Peirce, of New York City, and Mary daughter of Henry Saylor, Esq., of Schuylkill Haven, Pa.

STURGES—MACLEOD.—By Rev. Arthur Brooks, of the Church of the Incarnation, October 8th, William Sturges, of Chicago, and Miss Bessie MacLeod, daughter of Dr. J. D. MacLeod, of Chicago, Ill.

URQUHART—DICKENS.—At the residence of the bride's father, Captain Elias Dickens, October 19th, 1876, by the Rev. William Suddards, Rector of Grace Church, George W. Urquhart, M. D., and Miss Mary E. Dickens, all of this city.

WALKER—FOND.—On the evening of the 5th inst., at the First Congregational Church, Milford, Conn., by the Rev. Mr. Lyman, of Brooklyn, N. Y., John Smith Walker, M. D., of Philadelphia, and Miss Sophie M., eldest daughter of Nathan G. Pond, of Milford, Conn.

DEATHS.

BERTHET.—In New York City, on Sunday, October 15th, suddenly, of heart disease, Felix Berthet, M. D.